### Detection of CYP3A2 in Formalin-Fixed, Paraffin-Embedded Rat Tissue

#### **Reagents:**

1X Automation Buffer
3% Hydrogen Peroxide
Antibody Diluent
Citrate Buffer
DAB Chromagen
Hematoxylin

#### **Antibody Information:**

Block: Protein Block Serum-Free Ready-To-Use
Dakocytomation USA
Carpinteria CA 93013
www.dakousa.com
1-800-235-5763
Catalog #X0909

#### Avidin Biotin Blocking Kit

Vector Laboratories, Inc. Burlingame, CA 94010 www.vectorlabs.com 1-800-227-6666 Catalog #SP-2001

#### Primary antibody: Rabbit anti-Rat Cytochrome P450 CYP3A2 Polyclonal Antibody

Chemicon International, Inc Temecula, CA 92590 www.chemicon.com 1-800-437-7500 Catalog #AB1276

Negative control serum: Normal Rabbit Serum Jackson Immunoresearch Laboratories, Inc. West Grove, PA 19390 www.jacksonimmuno.com 1-800-367-5296 Catalog #011-000-001 LSAB+ System-HRP Dakocytomation USA Carpinteria CA 93013 www.dakousa.com Catalog #K0690

Note: This kit contains all the reagents necessary for secondary and label antibodies.

#### **Staining Procedure**

Positive Control Tissue: Rat Liver Stain Localization: Cytoplasmic

Deparaffinize and hydrate slides through the following solutions:

Xylene	2 times	5 minutes
100% Ethanol	2 times	3 minutes
95% Ethanol	2 times	3 minutes
1X Automation Buffer	2 times	5 minutes

Apply avidin block - 15 min at RT.

- 1. Quench endogenous peroxidase by placing slides in 3% hydrogen peroxide for 15 minutes.
- 2. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.

3.	Unmasking Technique using the decloaker.
	Add 500ml distilled water to the pan of the decloaker.
	Place a full rack of slides in a Tissue Tek <sup>TM</sup> container containing 250ml of 1X citrate
	buffer solution.
	Decloak for 5 minutes. Pressure
	Depressurize for 10 minutes.
	Remove pan top and cool for 10 minutes. Temperature
	Rinse in distilled water two times for 3 minutes each.
4.	Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.
5.	Incubate slides in Dako Serum-Free Protein Block for 10 minutes at room temperature.  Lot# Exp. Date
	DO NOT RINSE SLIDES. CONTINUE TO AVIDIN-BIOTIN.
6.	Apply Avidin/Biotin block
	Lot# Exp. DateNew Kit: yes / no

Quick rinse in 1X Automation Buffer Apply biotin block - 15 min at RT. Wipe excess block

# DO NOT RINSE SLIDES WITH BUFFER BEFORE ADDING PRIMARY ANTIBODY.

Apply primary antibody (Cyp3A2) at a 1:300 dilution and incubate for one hour at room temperature.			
Lot# Aliquoted yes / no Date Aliquoted			
For negative control slides, normalize the normal rabbit serum to the protein concentration of the primary antibody (Cyp3A2) and use this to make a 1:300 dilution. Apply to slides and incubate for one hour at room temperature.  Lot# Reconstituted Date			
8. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.			
LSAB+ Kit Lot# Exp. Date			
9. Apply Link – Secondary (yellow bottle) from LSAB+ Kit and incubate for 30 minute at room temperature.	es		
10. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.			
11. Apply Label (red bottle) from LSAB+ Kit and incubate for 30 minutes at room temperature.			
12. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.			
13. Apply liquid Dako DAB Chromagen for 6 minutes in the dark.  (Add 1 drop of DAB per ml of substrate)  Lot# Exp. Date New Kit: yes / no			
14. Rinse in tap water 3 minutes.			
15. Counterstain with Modified Harris Hematoxylin for 30 seconds.			
16. Rinse in tap water until water is clear.			
17. Place slides in 1X Automation buffer for 1 minute with gentle agitation to blue slide	es.		
18. Dehydrate through the following solutions.			

95% Ethanol	1 change	3 minutes
100% Ethanol	3 changes	3 minutes
Xylene	2 changes	5 minutes

## 19. Coverslip

updated 05/31/06